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APPLICATION NO	FILING DATE	FIRST NAME/INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09 918,404	07 30 2001	Lawrence A. Booth JR.	INTL-0618-US (P11949)	4653

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EXAMINER

MACCHIAROLO, PETER J

ART UNIT PAPER NUMBER

2875

DATE MAILED: 01 13 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918.404

Applicant(s)

BOOTH ET AL

Examiner

Peter J Macchiarolo

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 18. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 7-9 are objected to because of the following informalities: The claims depend on claim 1, and thereby do not further limit the parent claim. The Examiner is interpreting this to be a typographical error and the intended dependency is on Claim 6. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inohara et al. (USPN 4,357,557) in view of Matsuura et al. (USPN 6,498,428).

In regards to claims 1, 6, and 11, Inohara discloses in figure 7, an EL display panel and module, comprising a front plate (1) having an EL material formed on one side thereof, a back plate (11) secured over the one side of the front plate, and a filler material (13) including a desiccant (silica gel particles) mixed into the filler material to seal the region between the front and back plates.

Inohara is silent to the light emitting material being organic.

However, Matsuura discloses in figure 1, an organic light emitting display comprising a front plate (2) having an organic light emitting material (5) formed on one side thereof.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace Inohara's EL material with Matsuura's organic light emitting material with the method recited in claim 11, since it is well known in the art that organic light emitting material can be manufactured thinner and therefore, can be made and lighter and more compact, and this corresponds to a strategic advantage in certain markets. Further, the method recited in claim 11 is well known and obvious.

In regards to claims 2 and 13, Inohara and Matsuura teach all of the recited limitations claims 1 and 11 (above).

Inohara further teaches in figure 7, the display includes a plurality of light emitting modules which form an array, each including a front plate (6) and a back plate (3) and filler material including a desiccant (silica gel particles) provided between the modules (13 between the front plates 6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct an organic light emitting display according to claim 1 with the method of claim 11 (above), further wherein the display includes a plurality of modules, each including a front plate and a back plate and filler material provided between the modules, since Inohara teaches this configuration completely removes moisture from the surroundings of the EL display panel.

In regards to claims 3, 5, 7, 9, 12, and 15, Inohara and Matsuura teach all of the recited limitations claims 1, 6, and 11 (above).

Inohara further teaches in column 2 lines 19-28, that the filler material includes silica gel particles as a desiccant, and this configuration protects the EL element from damaging moisture. Inohara further teaches in column 2 lines 29-36, that the spacers, which have been bonded together by an adhesive (epoxy), are soaked in a suitable filler material (silica gel particles mixed into silicon oil) and then heated.

Inohara is silent to the filler material containing epoxy.

However, it can be seen that some epoxy will propagate into the filler material an assembly step.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct an organic light emitting display according to claim 1 with the method of claim 11 (above), further wherein the desiccant is a silica, and further wherein the filler material includes epoxy, since Inohara teaches this configuration protects the EL element from moisture.

In regards to claims 4, 8, and 14, Inohara and Matsuura teach all of the recited limitations of claims 1, 6, and 11 (above).

Matsuura further teaches in column 8 lines 22-25 that preferred moisture absorbing polymers for an organic light emitting displays are, among others, silica gel and zeolite.

Both Inohara and Matsuura are silent to motivate one to use the desiccant zeolite.

However, it is well known to those skilled in the art that zeolite absorbs more moisture in a low relative humidity environment than silica gel.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct an organic light emitting display according to claim 1 with the method of claim 11 (above), further wherein the desiccant is zeolite since it is known to those skilled in the art that zeolite absorbs moisture better in a low relative humidity environment than silica gel.

In regards to claim 10, Inohara and Matsuura teach all of the recited limitations claim 6 (above).

Matsuura further teaches in figure 1 that the organic light emitting material is deposited on the one side of the front plate (2).

Matsuura is silent to the exact reason for this configuration.

However, it is well known in the art that this configuration will allow a protective barrier to be formed around the organic light emitting material, which will allow the organic electroluminescent element to function properly.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a display according to claim 6 (above), further wherein the organic light emitting material is deposited on the one side of the front plate, since it is well known that this configuration will allow the organic electroluminescent element to function properly.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Examiner notes that in the instant Application, claims 1,6, and 11 are written so broadly, that Ishihara et al. (USPN 5,632,663) may be interpreted to read on the claims.

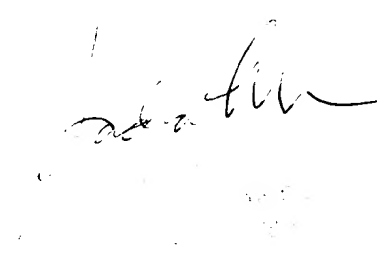
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (703) 305-7198. The examiner can normally be reached on 7:30 - 4:30, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

pjm
January 7, 2003

A handwritten signature in cursive script, appearing to read "Sandra O'Shea", is written over a faint, circular official stamp. The stamp contains some illegible text, possibly a date or reference number.